



Gulf of Mexico Harmful Algal Bloom Bulletin

21 January 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: January 18, 2005

Conditions:

A harmful algal bloom has been identified offshore southwest of Clearwater and west of Sarasota. Moderate impacts are possible at the beach through Sunday. Reports of discolored water are possible.

A harmful algal bloom has been identified southwest of Cape Sable and north of the lower Keys. Discolored water is possible in the area. No impacts expected at Key West through Sunday.

Analysis:

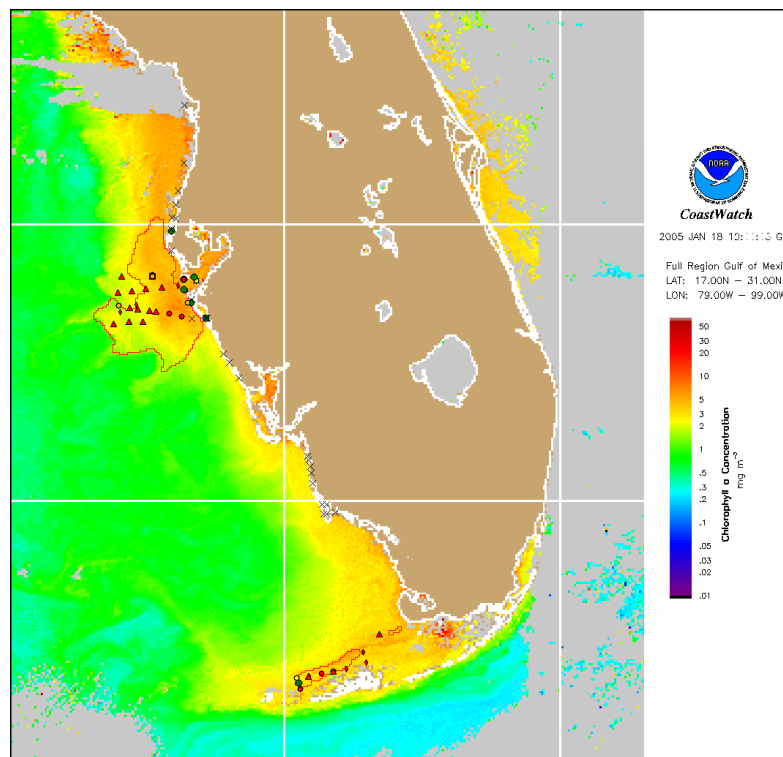
The harmful algal bloom located offshore west of the Tampa Bay area persists. Medium concentrations of *K. brevis* were identified January 13-19 by Mote. The bloom extends from 82°36'W to 83°21'W along its east-west axis, and from 27°54'N to 27°4'N along its north-south axis. Imagery is not available for the last 48 hours, the bloom may have moved slightly south. Chlorophyll levels range from 5-8 $\mu\text{g/L}$, eastern edge to less than 3 $\mu\text{g/L}$, western edge, with the highest point at 27°24'N 82°47'W, about 10 miles off of Bradenton. Low to very low concentrations of *K. brevis* have been reported onshore from Boca Grande to Sarasota. Onshore winds may promote moderate impacts at the beach, including respiratory distress, through Saturday. Strong northerly winds from Saturday night through Monday make intensification and continued southern transport of the bloom likely.

The harmful algal bloom southwest of Cape Sable and north of the lower Keys persists. The flagged areas to the west and south of Key West are remains of resuspension. West to southwest winds through Sunday favor maintenance of the bloom location. Chlorophyll is 4-6 $\mu\text{g/L}$ from 5 miles southwest of Cape Sable to north of Big Pine Key. Intensification of the bloom is unlikely; beach impacts are not expected at Key West.

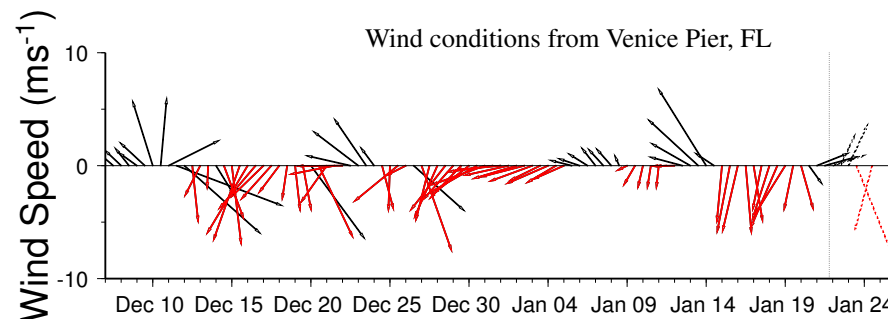
-Stolz, Fenstermacher, Fisher

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4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

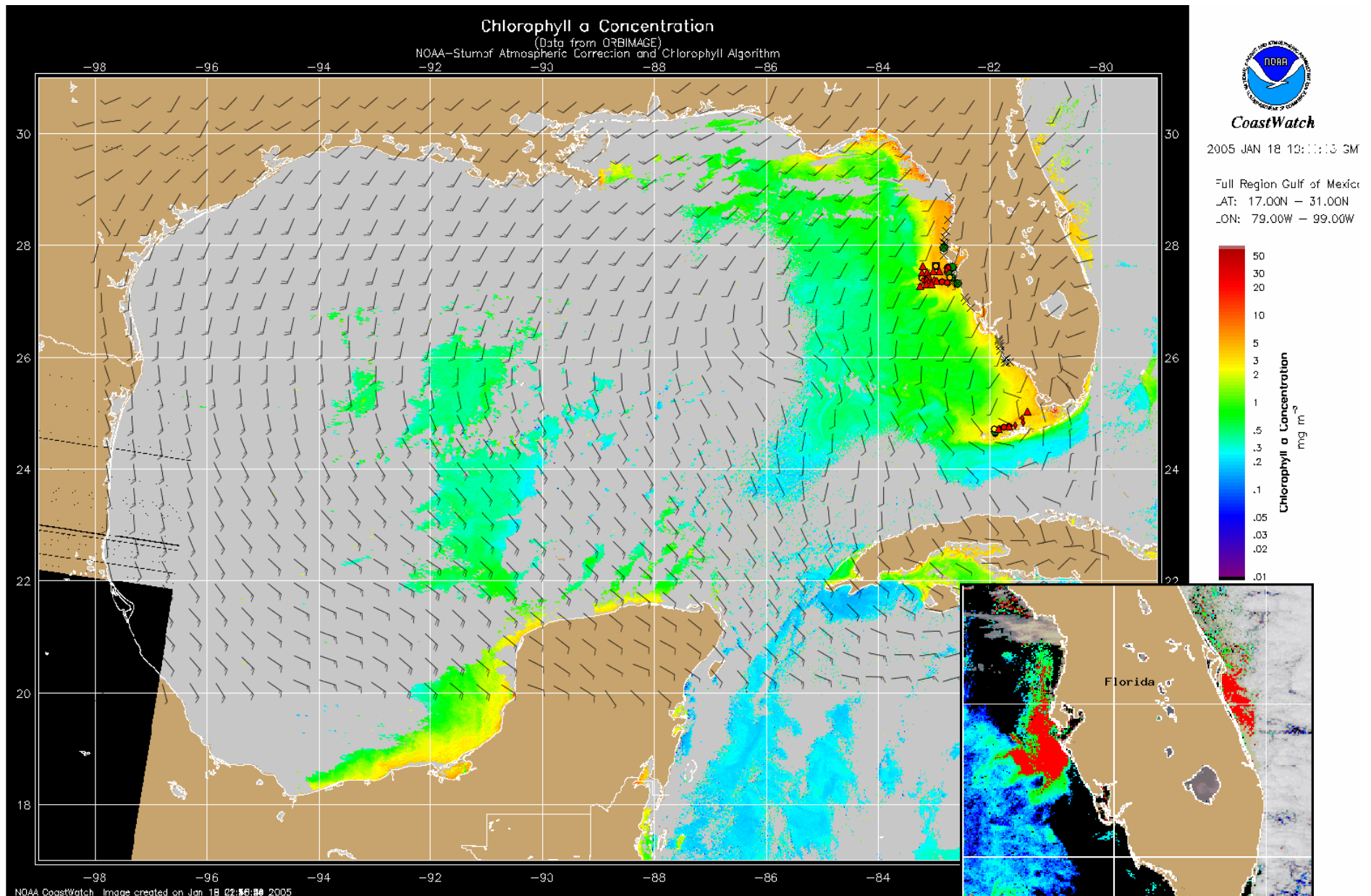


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 19, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

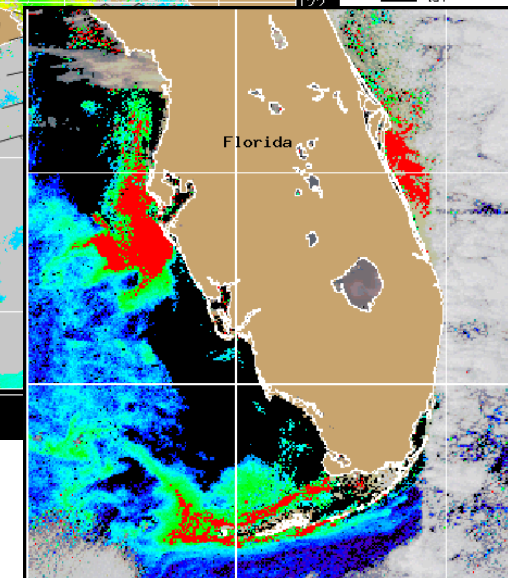


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Tampa: Westerlies to southwesterlies are expected through Saturday at 5-10 knots (3-5 m/s), building to 20 knots (10 m/s). 20-25 knot (10-13 m/s) winds out of the North by Sunday. Keys: Light westerlies today, becoming variable tonight and Saturday. Winds becoming southwest and increasing to 15 knots (8 m/s) Saturday night, Sunday west shifting to northwest Sunday and picking up to 25 knots (13 m/s).



Chlorophyll concentration from satellite and forecast winds for January 22, 2005 12Z with cell concentration sampling data from January 19, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)

